

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1, 2, and 4-22 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 2 and 4-20 rejected under 35 U.S.C. 103(a) as being unpatentable over Goldschmidt Iki et al (USPN 6,594,825), in view of Jeong (USPN 6,285,819), in view of Chernock et al (USPN 6,314,569), in further view of Lownes et al. (USPN 6,137,539) in further view of Dougherty US Patent No. 5,629,739.

With respect to claims 1, 7, and 12, note the Goldschmidt Iki et al reference which discloses the claimed audio and/or video signal transmitting system with a plurality of audio and/or video signal transmitting peripheral apparatuses with a plurality of analog outputs and a plurality of digital input/output means is met as seen in Fig. 1. The transmitting apparatuses or sources provide signals indicating the type of the transmitting apparatus or source (i.e. video recorder/playback device, digital video disk (DVD), compact disk (CD), etc.) and the signal format of the audio and/or video signal, which are unique to the specific transmitting

apparatus or source, where the information is sent to system controller 104 (Fig. 1)/system controller 200 (Fig. 2) and the information is processed for output on a display device as an EPG as seen in Fig. 4, which shows a source identifier 402, a transport medium / format at 404 and alternatively an audio format at 406. The system 100 contains various devices such as television display device 102, CD player 112, etc for transmitting/receiving analog and digital data (col. 3:5-43 & col. 4:36-54) and forming a display signal for television/display device 102. Video characteristics are stored including indicators of signal format from various inputs (Fig. 4, items 404, 406, see col. 7, line 40 - col. 8, line 7). Controller 200 (which includes controller 208) is operative as means to provide an overlay of these characteristics to facilitate user selection (col. 7:2-11). The Goldschmidt Iki et al. reference also clearly discloses that the

of the audio and/or video signal transmitting peripheral apparatus and the format type of the output video signal are indicated by predetermined characters as met by the EPG and program selection controller 208, which may display options in a separate box or window on the display device, overlaying (or superimposing) the current video display with the options, etc (col. 7, lines 2-11). In addition, in one implementation, all the characteristics for each version or source may be displayed, such as the predetermined characters including "ANALOG BROADCAST", "DIGITAL CABLE", "DVD", "STEREO", "DOLBY PRO LOGIC" and "THX; DOLBY AC3", as shown in the EPG table of Fig. 4, which describe the type of audio and/or video source or signal transmitting apparatus (i.e. "DVD")

and the format type of the output video signal (i.e. "ANALOG" or "DIGITAL"), which is generated and provided from each transmitting apparatus or source as described above (see col. 6, line 66 - col. 7, line 11 and col. 7, line 29 - col. 8, line 3). The claimed, "...means for superimposing the image signal on the display video signal, so that when displayed the predetermined characters or logo are superimposed on a displayed image such that a user can view the type of the audio and/or video signal transmitting apparatus and the format type pertaining to only the display video signal currently being displayed at the time the display video signal is displayed", is met in part by the Goldschmidt Iki et al reference, as described above, where alternate versions may be provided to the user, since col. 7, lines 2-5 states that, "This provision can be in any of a wide variety of manners, such as ... overlaying the current video display with the options," which meets the claimed, "the predetermined characters are superimposed on a displayed image such that a user can view the type of the audio and/or video signal transmitting apparatus...at the time the display video signal is displayed." Goldschmidt Iki et al reference also teaches wherein the transmitting peripheral apparatus is connected to the receiving apparatus [Col. 3 lines 20-45], and the format type selectively indicates analog signal and digital signal [Col. 7 lines 45-60].

Although it is shown in Goldschmidt Iki et al reference, particularly in Fig. 4, that the format and source information is obtained from each of the respective device and later stored in the controller thereby rendering it obvious that the source and

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format information is indeed generated in the appropriate devices, the Jeong reference is relied upon to teach that it is well known in the art for a peripheral transmitter apparatus (video cassette tape recorder) to generate its source and format information [Col. 2 lines 10-33]. Therefore it would have been obvious to one of ordinary skill in the art to combine the teachings of Goldschmidt Iki and Jeong to individually generate the format information of each of the peripheral device for the convenience of the user.

Still however the combined teachings of Goldschmidt Iki et al and Jeong reference does not explicitly disclose multiplexing the digital information signal onto a digital source signal, and separating out (or demultiplexing) the digital information signal from the digital audio and/or video signal and then processing that digital information signal to provide an superimposed image signal (or overlay) on the corresponding digital video signal that is being displayed, it is well known in the art of interactive video distribution systems that digital information signal(s) and digital source signal(s) are multiplexed onto a digital source signal for transmission to a receiver where the signals are demultiplexed and processed accordingly, as disclosed and taught by the Chernock et al reference in col. 4, lines 41-55. Therefore, it would have been obvious to one of ordinary skill in the art at the time on the invention to have combined the teachings of the Goldschmidt Iki et al and Jeong reference with the Chernock et al reference for the advantage of combining or multiplexing a digital information signal onto a digital source signal in order to reduce bandwidth of the transmitted signal. One

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of ordinary skill in the art would have been led to make such a modification since digital multiplexing is well known in the art, especially through the use of the MPEG-2 standard for compression and multiplexing.

In addition, Goldschmidt Iki et al does not explicitly disclose the claimed, "means for superimposing the image signal on the display video signal, so that when displayed the predetermined characters or logo are superimposed on a displayed image such that a user can view the type of the audio and/or video signal transmitting apparatus and the format type pertaining to only the display video signal currently being displayed at the time the display video signal is displayed." However, the Lownes et al reference specifically teaches a status display which includes information on the current video or program being displayed, such as a digital television program, as well as indications of the format being used to display the received signal (see Figs. 3A-3E and col. 8, lines 5-38). Lownes also teaches of an audio and/or video signal transmitting apparatus operable to asynchronously transmit the information identifying the type of said transmitting apparatus [Col. 2 lines 59-62]. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have combined the teachings of the Goldschmidt Iki et al, Jeong and Chernock et al references with the additional teachings of the Lownes et al reference for the advantage of providing a display in which only the information pertaining to the video signal currently being displayed is shown, which allows a user to view specific information that is only related to the currently selected audio and/or

video transmission. One of ordinary skill in the art would have been led to make such a modification since it is well known in the art of computer monitors/receivers and/or television displays/receivers to provide an on screen display, such as an overlay or superimposed image, that relates to only the information pertaining to the video signal currently being displayed for the advantage given above.

Still Goldschmidt's description of the types of characteristics of the peripheral devices [Col. 8 lines 27-47] fails to specifically include the equipment brand of the said transmitting peripheral devices. In an analogous art, Dougherty discloses that a serial number (describing the equipment brand information) may be added by the encoder which uniquely identifies the signal source [Col. 7 lines 47-52]. Therefore it would have been obvious to one of ordinary skill in the art to modify the system of Goldschmidt to include manufacturing information of the peripheral source device among other identification information for the user's knowledge.

With respect to claims 2, 8, and 13, the claimed use of a predetermined code in a comparison table is seen with the EPG shown in Fig. 4 as a table and including "codes" as indicators of a signal format such as "analog broadcast," "digital cable," "stereo," "Dolby pro logic," etc.

With respect to claims 4, 9-10, and 14-16, Goldschmidt Iki does not teach use of a predetermined bit map logo to indicate the format. However, the Chemock et al reference as previously combined with the Goldschmidt Iki et al reference above, further discloses that bitmaps may be used for may text and graphics objects, such as logos, that may be used for on-screen displays (OSD) or used as a graphics overlay with video content (see col. 5, lines 44-55). Therefore, it would have been obvious to one skilled in the art at the time of the invention to have further modified Goldschmidt Iki et al by using bit map logos in order to provider users with a readily understood, aesthetically pleasing display that provides for easy program selection as taught by the Chemock et al reference.

With respect to claim 5, the claimed superimposing at the receiving side is met as noted above in response to claim 1. Furthermore, the claimed window synthesizing using a plurality of windows is met by overlaying characteristics and use of separate windows on a display (col. 7:2-11).

With respect to claims 6, 11, and 17, the claimed use of IEEE 1394 formats is met by use of an IEEE 1394 bus and standards as taught in col. 3:38-43.

With respect to claim 16, the claimed window synthesizing using a plurality of windows is met by overlaying characteristics and use of separate windows on a display (col. 7:2-1 1). Goldschmidt Iki does not teach superimposing for each signal the format at the transmitting side. However, the Lownes et al reference, as combined with Goldschmidt Iki above, clearly teaches this limitation as previously described above in claim 1.

With respect to newly added claims 18-20, wherein an audio and/or video signal transmitting apparatus operable to isochronously transmit the digital audio and/or video signal is disclosed. Lownes discloses providing status information isochronously [Col. 2 lines 59-62].

4. Claims 21-22 rejected under 35 U.S.C. 103(a) as being unpatentable over Goldschmidt Iki et al (USPN 6,594,825), in view of Jeong (USPN 6,285,819), in view of Chernock et al (USPN 6,314,569), in further view of Lownes et al. (USPN 6,137,539) in further view of Dougherty US Patent No. 5,629,739, in further view of Ohara et al. US Patent No. 6,292,618.

With respect to claim 21-22, the combination of Goldschmidt Iki, Jeong, Chernock, and Lownes fails to explicitly teach of a system wherein a superimposed display video signal from the means for superimposing the image signal inputted through the digital input/output means on the display video signal

includes a signal from the analog input means. In an analogous art, Ohara discloses an image reproducing system that can reproduce both a digital and an analog signal. In particular, Ohara teaches that when an analog signal is transmitted an analog On Screen Display is superimposed on the screen [Col. 3 lines 65- Col. 4 lines 20]. Therefore it would have been obvious to include this feature in the system of Goldschmidt Iki, Jeong, Chernock, Lownes, and Dougherty to simplify the user's operation of the system.

Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SAHAR A. BAIG whose telephone number is (571)270-3005. The examiner can normally be reached on Monday-Friday (8:00 - 4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Kelley can be reached on 571-272-7331. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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